

Kentucky Department of Education
Science Adoption 2008-2014

Provided by the Publisher

ISBN - 9780618965885		Publisher - Houghton Mifflin Company	
Kentucky Experience Science Student Book			
Type - P1	Author - Badders, Carnine, Jeanpierre, Feliciani, Sumners, Valentino		
Copyright - 2009	Edition - 1st	Readability - 2.67 SSR Spache	
Course - Elementary Science		Grade(s) - 3	
Teacher Edition ISBN if applicable		9780618965670	

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Overall Recommendation:

☒ **Recommended as Basal**

Overall Strengths, Weaknesses, Comments:

- *ELL and Technology support, while referenced in the teacher's edition, are not available without receiving the gratis materials.
- *The readability of the text is above grade level, and includes excessive vocabulary in some sections.
- *The correlation of materials with state standards is questionably in areas, like for Big Idea 5, Biological Change.
- *Critical thinking questions in the student text are well written.
- *Students get the opportunity to see data represented in a variety of charts and graphs, and interpret that data.
- *Investigations are engaging, and include lots of helpful teacher tips.

CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

- ☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

☐ Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 7 Big Ideas of science to the following extent:

- | | | | | |
|---|--|--|--|------------------------------|
| a) Structure and Transformation of Matter | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| b) Motion and Forces | <input type="checkbox"/> Strong | <input checked="" type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| c) The Earth and the Universe | <input checked="" type="checkbox"/> Strong | <input checked="" type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| d) Unity and Diversity | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| e) Biological Change | <input type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input checked="" type="checkbox"/> Little | <input type="checkbox"/> N/A |
| f) Energy Transformation | <input checked="" type="checkbox"/> Strong | <input type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |
| g) Interdependence | <input type="checkbox"/> Strong | <input checked="" type="checkbox"/> Moderate | <input type="checkbox"/> Little | <input type="checkbox"/> N/A |

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- 2) Addresses content-specific enduring understandings from the related Program of Studies standards. ☐ Strong ☒ Moderate ☐ Little ☐ N/A
- 3) Addresses content-specific skills and concepts from the related Program of Studies standards. ☐ Strong ☒ Moderate ☐ Little ☐ N/A
- 4) Content addressed is current, relevant and non-trivial ☒ Strong ☐ Moderate ☐ Little ☐ N/A
- 5) Provides opportunities for critical thinking/reasoning ☐ Strong ☒ Moderate ☐ Little ☐ N/A
- 6) Strengths, Weaknesses, Comments:
- Specific strengths-which areas/concepts are covered exceptionally well?
 - Specific weaknesses-which areas/concepts would likely require supplementing?

*Although correlations for the Kentucky Big Ideas are stated, some were forced correlations. For example, the correlation with Big Idea 5, Biological Change, lists activities to support this where students are observing and sorting rocks and testing minerals. We found two pages of the student text relate to Standard 5.

*Investigations fill in gaps in student text, with regard to states of matter (i.e. water).

*Some higher-level concepts are presented, which would allow for acceleration of curriculum (i.e. chemical changes, kinetic/potential energy.)

*With regard to motion and forces, we find no investigations of position and motion, other than magnetism activities. Motion concepts are addressed in student text, however. Student text is also heavily focused on simple machines.

*Weather patterns are not thoroughly addressed; few activities to address weather patterns. Good activities for weather phenomena, such as rain, clouds, etc.

*Sun/earth relationship, producing shadows is addressed through activities as well as text.

*Plant investigations are varied and congruent with state standards.

*Food chains within different habitats are addressed in the text, but not through investigations.

*The energy transformations section includes some good light investigations. The only circuit construction lab involves a solar cell and motor.

*Minimal investigations on interdependence are included.

*Critical thinking questions in the student text include some good questions, but guiding questions in the investigations predominantly aim at lower level thinking.

B. Functionality & Suitability

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

- 1) Suitability ☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

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2) Content quality

☒ Strong ☐ Moderate ☐ Little ☐ N/A

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community

3) Connections to Literacy

Note: may apply to either student or teacher editions

☐ Strong ☒ Moderate ☐ Little

- Employs a variety of reading levels and is grade/level appropriate
- Contains pre, during, post reading activities
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- Engaging text- does the text facilitate learning?
- Does understanding the text require having performed the imbedded activities?

4) Connections to Technology

☐ Strong ☒ Moderate ☐ Little

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data

5) Support for Diverse Learners

☐ Strong ☐ Moderate ☒ Little

- Provides support for ESL students
- Provides support for differentiation of instruction in diverse classrooms

Note: may apply only to teacher edition

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

*Vocabulary lists are extensive in some sections and may present frustration for this grade level (i.e. wavelength, trough, and crest in the sound section, leaf margin, netted and parallel veins in the plant classification.)

*Teacher's edition contains a science reader support section with preview it, read it, and assess it questions.

*A student glossary is included at the end of each section, and includes some pictures to help illustrate the concepts.

*Test generator, the online science reader, eduplace.com website (simulations), National Geographic videos and an ELL handbook are referenced in the teacher's edition, but may only be available as gratis materials.

C. Supports Inquiry and Skill Development

☐ Strong Evidence

☒ Moderate Evidence
☐ Little or No Evidence

1) Promotes Inquiry, research and Application of Learning

☐ Strong ☒ Moderate ☐ Little

- Provides opportunities for inquiry and research that includes activities such as self-selecting topics, formulating authentic questions, gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, time lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development

☒ Strong ☐ Moderate ☐ Little

- Provides opportunities to make sense of data
- Provides opportunities for critical thinking and reasoning (analyze arguments, distinguish fact/opinion, recognize bias)
- Provides opportunities to examine a range of types of evidence
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

*There are not many opportunities for self selected inquiry investigations.
*Diverse use of graphical representations of data.
*Critical thinking questions are included at the end of each section in the student book. Students are asked to interpret a variety of data.

D. Supports Best Practices of Teaching and Learning

☒ Strong Evidence
☐ Moderate Evidence
☐ Little or No Evidence

1) Engages Students

☒ Strong ☐ Moderate ☐ Little

- Includes content geared to the needs, interests, and abilities of students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the

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appropriate learning levels

- Activities are truly congruent to the concepts addressed, not merely correlated
Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

☒ Strong ☐ Moderate ☐ Little

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels
Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

*Investigations include a variety of high interest activities.
*Assessments include questions of various DOK levels.

E. Has an Organization/ Format that Supports Learning and Teaching

☐ Strong Evidence
☒ Moderate Evidence
☐ Little or No Evidence

1) Organizational Quality

☒ Strong ☐ Moderate ☐ Little

- Print and/or electronic materials present minimal barriers to learners
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size

Included media are durable, easy to use and have technical merit

- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text)

☐ Strong ☒ Moderate ☐ Little

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

*Organization of student text uses appropriate text features to clue students to vocabulary, includes an illustrated glossary in each section.

- *Student objectives are stated in teacher's edition.
- *Teacher's edition section on supporting the science reader does not include a copy of all student pages of the text
- *The essential components alone (without the gratis materials) are weak in technology and ELL support.
- *Be aware that some investigations (for example, electricity, light, and life science investigations) involve the use of materials that may not commonly be found in elementary classrooms (i.e. solar cells, electric motors, diffraction materials, living materials).

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

- ☒ **Strong Evidence**
☐ **Moderate Evidence**
☐ **Little or No Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

- *Illustrated vocabulary cards, independent and leveled readers, ELL support, a test generator, student workbook and study guide, and express lab (5 min. lab ideas) that are included would be very helpful.
- *The blackline masters for the investigations are in the gratis materials. Be sure you get those if you select this basal!